

## Technical Data Sheet



### ALTECH PP-H FC 4940/100 TV40

## MOCOM

|                        |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| Base Polymer           | Polypropylene Homopolymer                                                           |
| Filler/Additive System | 40 % talcum                                                                         |
| Colour                 | natural color                                                                       |
| Special Features       | high stiffness,high heat stabilised,processing stabilised,easy release (demoulding) |
| Market Segment         | electrical and electronic,building and construction,Personal care                   |
| Application Area       | household goods,food contact,domestic appliances,electrical components              |
| Typical Applications   | kitchenware,functional components,housings                                          |

|                       |                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions | in a dry air (dessiccant) dryer 80-120 °C<br>for 2-3 h<br>in an air circulating dryer 80-120 °C<br>for 2-4 h<br>dependant on moisture content<br>max. moisture content <0,10 % |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Processing Injection Moulding | melt temperature 200-250 °C<br>mould temperature 20-70 °C |
|-------------------------------|-----------------------------------------------------------|

|         |                           |
|---------|---------------------------|
| Storage | dry, protected from light |
|---------|---------------------------|

|                    |            |
|--------------------|------------|
| Minimum Shelf Life | months <24 |
|--------------------|------------|

| Properties                              | Value | Dimension              | Test Norm   |
|-----------------------------------------|-------|------------------------|-------------|
| <b>Mechanical Properties</b>            |       |                        |             |
| Flexural Modulus                        | 5100  | MPa                    | ISO 178     |
| Flexural Stress (3.5% Strain)           | 59    | MPa                    | ISO 178     |
| Tensile Modulus                         | 4700  | MPa                    | ISO 527     |
| Tensile Stress at Yield                 | 33    | MPa                    | ISO 527     |
| Tensile Elongation at Yield             | 3     | %                      | ISO 527     |
| Tensile Elongation at Break             | 6.5   | %                      | ISO 527     |
| Impact Strength (Charpy, 23°C)          | 26    | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Impact Strength (Charpy, -40°C)         | 12    | kJ/m <sup>2</sup>      | ISO 179/1eU |
| Notched Impact Strength (Charpy, 23°C)  | 2.5   | kJ/m <sup>2</sup>      | ISO 179/1eA |
| Notched Impact Strength (Charpy, -40°C) | 1.5   | kJ/m <sup>2</sup>      | ISO 179/1eA |
| <b>Thermal Properties</b>               |       |                        |             |
| Vicat B50                               | 105   | °C                     | ISO 306     |
| DSC (Melt Point)                        | 166   | °C                     | ISO 11357   |
| <b>Rheological Properties</b>           |       |                        |             |
| Melt Index (MVR)                        | 3.5   | cm <sup>3</sup> /10min | ISO 1133    |
| MVR temperature                         | 230   | °C                     | -           |
| MVR load                                | 2.16  | kg                     | -           |

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|                             |           |   |           |
|-----------------------------|-----------|---|-----------|
| Shrinkage (lengthwise, 24h) | 1 - 1.4   | % | ISO 294-4 |
| Shrinkage (lateral, 24h)    | 0.8 - 1.2 | % | ISO 294-4 |

#### Physical Properties

|         |      |                   |          |
|---------|------|-------------------|----------|
| Density | 1230 | kg/m <sup>3</sup> | ISO 1183 |
|---------|------|-------------------|----------|